REMARKS

Claims 1, 3-25 were pending in the present application. No claims have been added. Claims 3, 23, and 24 as been cancelled. Therefore, upon entry of the present Amendment claims 1, 4-22, and 25 will be pending

Reconsideration of this application, in view of the foregoing amendments and the following remarks, is respectfully requested.

Claim Rejections - 35 USC § 103

Claims 1-8, 13-14, and 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Persson et al U.S. Patent No 6,587,500 B1 in view of Fonte U.S. Patent No 5,815,101. Applicants respectfully traverse these rejections.

Claims 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Persson et al U.S. Patent No 6,587,500 B1 in view of Fonte U.S. Patent No 5,815,101 and further in view of Miya U.S. Patent No 5,818,869. Applicants respectfully traverse these rejections.

Persson has a system that correlates an incoming set of samples with stored values. The embodiments of the Applicant correlate incoming samples with other incoming samples. Fonte does not teach a change in sampling rate based on some result. Fonte has a problem where there is ambiguity in the result with a single sampling rate so he looks at the same signal from a different perspective by using a second sampling rate. In Forte, the trigger to change the sampling rates is probably a timer or counter. The trigger for the Applicant's embodiments is signal dependent.

Fonte then compares the two results to determine if there was an ambiguity or not and, if there is, to resolve it. Fonte's system will always sample at two sampling frequencies and then compare the two results to gain a benefit. The Applicant's embodiments will only switch sampling frequencies if the correlation result is high enough. This may never happen. When the sampling frequency is switched in the

Applicant's embodiments, the samples are processed on their own with no reference to the samples taken at the first sampling frequency.

If one of ordinary skill in the art were to apply, Fonte's sampling change to Persson's correlation to determine phase then they will end up with a system that determined the phase at one sampling rate and then determined the phase at a second sampling rate. Applicant's embodiments do not do the correlation on the samples taken at the second sampling rate. Rather Applicant's embodiments process this second set of samples in a completely different way – this is made explicit in claim 9.

Applicant believes this application and the claims herein to be in a condition for allowance. Should the Examiner have further inquiry concerning these matters, please contact the below named attorney for Applicant.

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_____   November 13, 2006
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